

REMARKS

Applicant thanks the Examiner for the careful consideration given to this application. Reconsideration and allowance are now respectfully requested in view of the amendment above and the following remarks. Claims 1 and 3-5 are pending in this application. Claim 1 is the sole independent claim. Claim 1 is amended. Claims 2 and 6-8 were previously cancelled.

Entry of Amendment After Final Rejection

Entry of the Amendment is requested under 37 C.F.R. § 1.116 because the Amendment: a) places the application in condition for allowance for the reasons discussed herein; b) does not present any additional claims without canceling the corresponding number of final rejected claims; and/or c) places the application in better form for an appeal, if an appeal is necessary. Entry of the Amendment is thus respectfully requested.

Claim Rejections under 35 U.S.C. §102

Claims 1-5 stand rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent Publication No. 2004/0143695 to Hashimoto (hereinafter “Hashimoto”). This rejection is respectfully traversed.

Applicants submit that Hashimoto fails to teach or suggest each of the elements of the pending claims. Claim 1, in part, recites “a method of backing up vehicular data in a vehicular system that includes an engine electronic control unit for controlling an engine and a plurality of electronic units including a data storing function, each of the electronic units being arranged so as to be separated from the engine electronic control unit, with the vehicular system being configured such that data can be transmitted and received between the engine electronic control unit and the electronic units via a vehicular communication network.” Hashimoto does not teach or suggest these features.

The Office Action alleged that Hashimoto discloses an engine electronic control unit and an electronic unit including a data storing function and that the vehicular system of Hashimoto is configured such that data can be transmitted and received between the engine electronic control unit and the electronic units via vehicular communication network. However, according to

Hashimoto, CPU, EEPROM and RAM are arranged in a single electric circuit board as described for example in paragraphs 0028 and 0100. Therefore, it should be said that Hashimoto is not configured such that data can be transmitted and received between the engine electronic control unit and the electronic units via vehicular communication network.

In the presently pending claims, on the other hand, the backup data is stored in the electronic units. The present application discloses that the electronic units may be mounted on, for example, a gear change unit, an air-conditioner, and an acoustics equipment, and that the electronic units are separated from the engine electronic control unit. Consequently, according to the present invention, it is possible to derive the backup data from the electronic units when the engine electronic control unit is replaced. In contrast, according to the system of Hashimoto, it follows that the backup data is removed from the system by the replacement of the engine electronic control unit. As a result, it is clear from Hashimoto that the same effect as that of the present invention can not be achieved.

Claim 1 also recites “recognizing with a flag, in the engine electronic control unit, a first time the engine electronic control unit is installed.” Hashimoto also does not teach this feature. Paragraphs 0062, 0064 and 0075 of Hashimoto disclose that the flag is set at the initial operation just after the power on operation. Therefore, the flag of Hashimoto does not correspond with the flag recited in the presently pending claims.

Furthermore, claim 1 recites “transferring, when the engine electronic control unit is replaced, the backup data via the vehicular communication network to a replaced engine electronic control unit from any of the electronic units with reference to the flag provided in the replaced engine electronic unit; and initializing the replaced engine electronic unit with the backup data transferred via the vehicular communication network.” Hashimoto also fails to teach or suggest these elements.

According to Hashimoto, when the abnormality is detected, the average values of the upper/lower limit values or typical values are used. See paragraphs 0068 and 0160 of Hashimoto. Hashimoto does not teach that data is transferred from the outside to the engine electronic control unit via the vehicular communication network when the engine electronic control unit is replaced. Furthermore, the backup data used in Hashimoto is the reference data stored in the nonvolatile data memory such as an EEPROM in advance. See paragraphs 0068,

0160 and 0165 of Hashimoto. The backup data used in Hashimoto is quite different from the backup data recited in the presently pending claims, which is updated at appropriate time intervals.

According to paragraphs 0092 and 0160 of Hashimoto, the abnormality history information can be analyzed in detail by using the external tool. In the case of the use of such an external tool, the read out operation of the data may be impossible depending on the malfunction mood of the engine control unit. Furthermore, the use of such a tool needs a more complicated system and the cost, thereof, would be increased. These disadvantages caused by the use of the external tool, are just the object to be solved by the present invention. Consequently, the object of the present invention cannot be solved by the prior art according to Hashimoto.

Hashimoto also does not teach or suggest the feature of claim 3. It is disclosed in paragraphs 0136-0138 and 0160 of Hashimoto that if data memory abnormality is found, the data stored in another nonvolatile data memory can be used. However, this option is not carried out during the replacing of the engine control unit. The features of the present invention is in that when the backup data transferred from any electronic control unit when the engine electronic control unit has been replaced cannot be used, the engine electronic control unit is initialized with default data.

As will be understood from the above, the operation in Hashimoto is quite different from that in the present invention. In the present invention, the initializing operation is carried out not for memory abnormality but for data abnormality. Furthermore, in the present invention, this operation is carried out not by the use of the data from other memory, but by the use of its default data. Therefore, the invention claimed in the present application is neither anticipated nor made obvious by Hashimoto.

Based on the distinctions noted above, Applicants respectfully request that this rejection of claims 1-5 under 35 U.S.C. §102 be withdrawn.

Disclaimer

Applicants may not have presented all possible arguments or have refuted the characterizations of either the claims or the prior art as found in the Office Action. However, the lack of such arguments or refutations is not intended to act as a waiver of such arguments or as concurrence with such characterizations.

CONCLUSION

In view of the above, consideration and allowance are respectfully solicited.

In the event the Examiner believes an interview might serve in any way to advance the prosecution of this application, the undersigned is available at the telephone number noted below.

The Office is authorized to charge any necessary fees to Deposit Account No. 22-0185.

Applicant believes no fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 22-0185, under Order No. 20696-00100-US1 from which the undersigned is authorized to draw.

Dated: November 18, 2009

Respectfully submitted,

Electronic signature: /Arlene P. Neal/
Arlene P. Neal
Registration No.: 43,828
CONNOLLY BOVE LODGE & HUTZ LLP
1875 Eye Street, NW
Suite 1100
Washington, DC 20006
(202) 331-7111
(202) 293-6229 (Fax)
Attorney for Applicant